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Attorney's Docket No.: 14603-012US1 Client's Ref.: P2002,0713USN

10/526097 BT01 Rec'd PCT/PT 2 5 FEB 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for setting a wavelength dependent output signal of use with an a light sensitive integrated circuit that is light-sensitive (1), the method comprising:

applying different wavelengths of light to the integrated circuit, the integrated circuit producing output signals in response to the different wavelengths of light;

- [[-]] wherein the measuring the output signals to obtain measured values; of the integrated circuit (1) are measured at different measured wavelengths; (λ1, λ2, λ3),
- [[-]] comparing the measured values (31, 32, 33) are compared to setpoint values (21, 22), which that correspond to the different wavelengths of light;

values (4) are calculated from the for the different wavelengths of light, the correction values being based on comparison of the measured values to the setpoint values; and

[[-]] and information about storing the correction values (4) is stored permanently in on the integrated circuit (1).

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2. (Currently Amended) The method according to of claim 1, [[-]] wherein the an integrated circuit (1) is on used which is a component of a semiconductor substrate; (5), [[-]] and

the setting method is performed using a testing card (6) for integrated circuits.

- 3. (Currently Amended) The method according to of claim 1 one of claims 1 or 2, [[-]] wherein the different wavelengths of light are applied via a light-emitting diodes diode (71, 72) is used as the light source for each measured wavelength (λ 1, λ 2, λ 3).
- 4. (Currently Amended) The method according to of claim 1 one of claims 1 through 3, [[-]] wherein the measured values define a sensitivity curve; and an integrated circuit (1) is used, whose wavelength dependent sensitivity runs in a wave,
- [[-]] and the wherein a smallest interval between two measured of the different wavelengths on the sensitivity curve $(\lambda 1, \lambda 2, \lambda 3)$ is selected so that it is smaller than an each interval $(\Delta \lambda)$ between a relative local sensitivity maximum and a relative local sensitivity minimum on the sensitivity curve of the wavelength dependent sensitivity.
- 5. (Currently Amended) The method according to of claim 4, [[-]] wherein a further comprising:

obtaining the sensitivity curve by interpolating between the measured values; and (3), which is compared to a setpoint curve (21, 22), from which a correction curve is calculated, is determined for the measured values (31, 32, 33) using interpolation,

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[[-]] and storing information about the correction sensitivity curve is stored permanently in on the integrated circuit (1).

- 6. (Currently Amended) The method according to of claim 1 one of claims 1 through 5, wherein the integrated circuit (1) contains comprises one or more photodiodes (91, 92).
- 7. (Currently Amended) The method according to of claim 1 one of claims 1 through 6, wherein the correction values are stored using Zener diodes (101, 102) are used for storing information on the integrated circuit (1).
 - 8. (Currently Amended) A semiconductor chip comprising:

containing a light-sensitive integrated circuit (1), as well as that stores information stored thereon for use in correcting the a wavelength-dependent output signal of the lightsensitive integrated circuit (1).

- 9. (Currently Amended) The semiconductor chip according to of claim 8, further comprising:
- [[-]] additionally containing a temperature sensor (300) for measuring a the temperature of an external light source[[,]] that illuminates the light-sensitive integrated circuit, the light-sensitive integrated circuit producing the wavelength-dependent output signal in response to light from the external light source:

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[[-]] wherein the light-sensitive integrated circuit stores as well as correction data for correcting the temperature dependent wavelength of that is derived using the temperature of the external light source, the correction data for use in correcting the wavelength-dependent output signal.

- 10. (Currently Amended) A method for operating a semiconductor chip according to claim-8, use with an integrated circuit that is light sensitive, the method comprising:
- [[-]] wherein illuminating the integrated circuit using an external light source, illuminates the integrated circuit (1) and an the integrated circuit producing an output signal in response to light from the external light source; is thus generated,
- [[-]] providing, to the integrated circuit, information about the wavelength of the light from the external light source; and source is transmitted to the integrated circuit (1),
- [[-]] and using the information about the wavelength is used for correcting to correct the wavelength dependent output signal of integrated circuit (1).
- 11. (Currently Amended) A The method of claim 10 for operating a semiconductor chip according to claim 9, further comprising:
- [[-]] wherein an external light source illuminates the integrated circuit (1) and an output signal is thus generated,
- [[-]] information about the wavelength of the light source is transmitted to the integrated circuit (1);
 - [[-]] the measuring a temperature of the external light source; and is measured,

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[[-]] correcting the information about the wavelength of the light source is corrected using the measured temperature; and the corresponding correction data,

- [[-]] and wherein the output signal is corrected using the corrected information about the wavelength of the light wavelength of the light source and corresponding correction data.
- 12. (New) The method of claim 10, wherein using the information to correct the output signal comprises:

obtaining a correction value that corresponds to the wavelength of light; and applying the correction value to the output signal.

- 13. (New) The method of claim 12, wherein the correction value comprises a difference between a setpoint value and the output signal at the wavelength.
- 14. (New) The semiconductor chip of claim 8, further comprising: a semiconductor substrate on which the light-sensitive integrated circuit is mounted.
- 15. (New) The semiconductor chip of claim 8, wherein the light-sensitive integrated circuit comprises one or more photodiodes for receiving different wavelengths of light.

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16. (New) The semiconductor chip of claim 8, further comprising one or more

Zener diodes for use in storing the information.